

AMENDMENTS TO THE CLAIMS

Please amend Claims 1 and 12, and add Claims 13-36 as follows.

1. (Currently Amended) A closed loop heating system for a nipple aspirate fluid aspiration device, comprising a plurality of inflatable bladders ~~in a series flow path~~ configured to provide compression of a breast; a reservoir; and a fluid flow path comprising an inflow line and an outflow line for placing the bladders in fluid communication with the reservoir; ~~wherein said closed loop system does not comprise a pump~~; wherein the entire closed loop heating system can be operated and removed without exposing a fluid within said closed loop to the outside of the closed loop system; wherein said bladders comprise a plurality of generally pear-shaped lobes; and wherein said fluid flow path comprises a movable wall such that fluid in the system can be moved by application of external pressure to the movable wall.

2. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the reservoir comprises a movable wall.

3. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 2, wherein the reservoir comprises a compressible container.

4. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 3 inflatable bladders.

5. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 6 inflatable bladders.

6. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, further comprising a heat exchange fluid contained within the closed loop.

7. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 4, wherein each bladder has an inflated width of no more than about 3 inches and an inflated length of no more than about 4 inches.

8. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 7, wherein each bladder has an inflated width of no more than about 2 inches and an inflated length of no more than about 3 inches.

9. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 4, wherein each bladder has an inflated thickness of no more than about 2 inches.

10. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 9, wherein each bladder has an inflated thickness of no more than about 1 inch.

11. (Original) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the fluid flow path comprises a first conduit extending between the bladders and the reservoir and a second conduit extending between the bladders and the reservoir.

12. (Currently Amended) An array of inflatable bladders for use in a breast pump, comprising:

at least a first and a second inflatable bladder in a series flow path configured to provide compression of a breast;

~~a mechanical link between the first and second bladder;~~

a flow path extending between the first and second bladder;

a reservoir;

and a flow path comprising an inflow line and an outflow line between the reservoir and the first and second bladder; said flow path comprising a movable wall such that a fluid in the system can be moved by application of external pressure to the movable wall;

wherein said bladders comprise a plurality of generally pear-shaped lobes;

~~wherein the array is adapted to cooperate with but does not include a pump; and~~

wherein said array can be ~~operated with the pump and removed from operative association with a~~ the pump without exposing the fluid within said array to the outside of the array of inflatable bladders.

13. (New) A closed loop heating system for a nipple aspirate fluid aspiration device, comprising a plurality of inflatable bladders configured to provide a compressive force anatomically adjacent to a lactiferous sinus of a breast for the purpose of expressing intraductal fluid; a reservoir; and a fluid flow path comprising an inflow line and an outflow line for placing the bladders in fluid communication with the reservoir; wherein the entire closed loop heating system can be operated and removed without exposing a fluid within said closed loop to the outside of the closed loop system; and wherein said fluid flow path comprises a movable wall

such that fluid in the system can be moved by application of external pressure to the movable wall.

14. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the reservoir comprises a movable wall.

15. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 2, wherein the reservoir comprises a compressible container.

16. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 3 inflatable bladders.

17. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 6 inflatable bladders.

18. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, further comprising a heat exchange fluid contained within the closed loop.

19. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 4, wherein each bladder has an inflated width of no more than about 3 inches and an inflated length of no more than about 4 inches.

20. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 7, wherein each bladder has an inflated width of no more than about 2 inches and an inflated length of no more than about 3 inches.

21. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 4, wherein each bladder has an inflated thickness of no more than about 2 inches.

22. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 9, wherein each bladder has an inflated thickness of no more than about 1 inch.

23. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the fluid flow path comprises a first conduit extending between the bladders and the reservoir and a second conduit extending between the bladders and the reservoir.

24. (New) An array of inflatable bladders for use in a breast pump, comprising:
at least a first and a second inflatable bladder configured to provide a compressive force to a breast anatomically adjacent to a lactiferous sinus of a breast for the purpose of expressing intraductal fluid;

a flow path extending between the first and second bladder;

a reservoir;

and a flow path comprising an inflow line and an outflow line between the reservoir and the first and second bladder; said flow path comprising a movable wall such that a fluid in the system can be moved by application of external pressure to the movable wall;

wherein said array can be removed from operative association with a pump without exposing the fluid within said array to the outside of the array of inflatable bladders.

25. (New) A closed loop heating system for a nipple aspirate fluid aspiration device, comprising a plurality of inflatable bladders configured to provide radially symmetrical compression of a breast along a longitudinal axis for the purpose of expressing intraductal fluid; a reservoir; and a fluid flow path comprising an inflow line and an outflow line for placing the bladders in fluid communication with the reservoir; wherein the entire closed loop heating system can be operated and removed without exposing a fluid within said closed loop to the outside of the closed loop system; and wherein said fluid flow path comprises a movable wall such that fluid in the system can be moved by application of external pressure to the movable wall.

26. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the reservoir comprises a movable wall.

27. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 2, wherein the reservoir comprises a compressible container.

28. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 3 inflatable bladders.

29. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 6 inflatable bladders.

30. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, further comprising a heat exchange fluid contained within the closed loop.

31. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 4, wherein each bladder has an inflated width of no more than about 3 inches and an inflated length of no more than about 4 inches.

32. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 7, wherein each bladder has an inflated width of no more than about 2 inches and an inflated length of no more than about 3 inches.

33. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 4, wherein each bladder has an inflated thickness of no more than about 2 inches.

34. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 9, wherein each bladder has an inflated thickness of no more than about 1 inch.

35. (New) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the fluid flow path comprises a first conduit extending between the bladders and the reservoir and a second conduit extending between the bladders and the reservoir.

36. (New) An array of inflatable bladders for use in a breast pump, comprising:

- at least a first and a second inflatable bladder configured to produce radially symmetrical compression of a breast around a longitudinal axis for the purpose of expressing intraductal fluid;

- a flow path extending between the first and second bladder;

- a reservoir;

- and a flow path comprising an inflow line and an outflow line between the reservoir and the first and second bladder; said flow path comprising a movable wall such that a fluid in the system can be moved by application of external pressure to the movable wall;

- wherein said array can be removed from operative association with a pump without exposing the fluid within said array to the outside of the array of inflatable bladders.